

**Claims**

1. Use of a substance that modulates or inhibits the expression or activity of TWEAK or of the TWEAK receptor, or of TWEAK and the TWEAK receptor, or that modulates or inhibits the intracellular signalling of the TWEAK receptor, in neural cells, for the manufacture of a medicament for the treatment, or prophylaxis or treatment and prophylaxis of neurological or psychiatric conditions or neurological and psychiatric conditions.
- 10 2. The use according to claim 1, wherein the substance is an antibody.
3. The use according to claim 1, wherein the substance is an antisense oligonucleotide.
- 15 4. The use according to claim 1, wherein the substance is siRNA.
5. The use according to claim 3 or 4, wherein the substance is provided by a viral vector or a liposome.
- 20 6. The use according to claim 1, wherein the substance is a TWEAK-digesting ribozyme.
7. The use according to claim 1, wherein the substance is an antagonist of the TWEAK receptor.
- 25 8. The use according to claim 7, wherein the antagonist has a molecular weight of less than 1000 g/mol.
9. The use according to claim 1, wherein the substance is a soluble part of the TWEAK receptor.
- 30 10. The use according to claim 1, wherein the neurological condition is at least one condition selected from the group consisting of a neurological disease with pathophysiological mechanisms involving ischemia or hypoxia or ischemia and hypoxia, a neurodegenerative disease, and a disease of the nervous system accompanied by neural cell death.

11. The use according to claim 10, wherein the neurological disease is at least one disease with pathophysiological mechanisms involving ischemia or hypoxia or ischemia and hypoxia selected from the group consisting of stroke, cerebral ischemia after resuscitation, intrapartal hypoxia, intraoperative hypoxia or ischemia or intraoperative hypoxia and ischemia, and intraocular ischemia or hypoxia or intraocular ischemia and hypoxia.  
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12. The use according to claim 10, wherein the neurodegenerative disease is at least one disease selected from the group consisting of stroke, ALS, Parkinson's disease, cerebral ischemia, multiple sclerosis, schizophrenia, depression, Huntington's disease, trinucleotide repeat disorders, peripheral neuropathies, dementias, and CNS trauma.  
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13. The use according to claim 10, wherein the disease of the nervous system accompanied by neural cell death is at least one disease selected from the group consisting of stroke, ALS, Parkinson's disease, cerebral ischemia, cerebral ischemia after resuscitation cardiovascular disease, multiple sclerosis, schizophrenia, intrapartal hypoxia, intraoperative hypoxia or ischemia or intraoperative hypoxia and ischemia, intraocular ischemia or hypoxia or intraocular ischemia and hypoxia, depression, Huntington's disease, trinucleotide repeat disorders, peripheral neuropathies, dementias, and CNS trauma.  
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14. The use according to claim 1, wherein the medicament further comprises one or more additional factors.  
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15. A method for identifying a substance, that modulates or inhibits the expression or activity of TWEAK, comprising
  - a) incubating a neural cell culture under conditions that mimic stroke,
  - b) contacting the cells with the substance,
  - c) comparing the level of TWEAK expression of these cells with the level of TWEAK expression of cells not contacted with the substance but incubated under the same conditions.  
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16. A method for the treatment or prophylaxis or treatment and prophylaxis of neurological or psychiatric conditions using a substance, that modulates or inhibits the expression or activity of TWEAK or of the TWEAK receptor, or of  
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TWEAK and the TWEAK receptor, or that modulates or inhibits the intracellular signalling of the TWEAK receptor, in neural cells.